

# **ATP III Guidelines**

## **Detection and Evaluation**

# Categories of Risk Factors

- Major, independent risk factors
- Life-habit risk factors
- Emerging risk factors

# Life-Habit Risk Factors

- Obesity (BMI  $\geq 30$ )
- Physical inactivity
- Atherogenic diet

# Emerging Risk Factors

- Lipoprotein (a)
- Homocysteine
- Prothrombotic factors
- Proinflammatory factors
- Impaired fasting glucose
- Subclinical atherosclerosis

# Risk Assessment

## Count major risk factors

- For patients with multiple (2+) risk factors
  - Perform 10-year risk assessment
- For patients with 0–1 risk factor
  - 10 year risk assessment not required
  - Most patients have 10-year risk <10%

# Major Risk Factors (Exclusive of LDL Cholesterol) That Modify LDL Goals

- Cigarette smoking
- Hypertension (BP  $\geq 140/90$  mmHg or on antihypertensive medication)
- Low HDL cholesterol ( $<40$  mg/dL)<sup>†</sup>
- Family history of premature CHD
  - CHD in male first degree relative  $<55$  years
  - CHD in female first degree relative  $<65$  years
- Age (men  $\geq 45$  years; women  $\geq 55$  years)

<sup>†</sup> HDL cholesterol  $\geq 60$  mg/dL counts as a “negative” risk factor; its presence removes one risk factor from the total count.

# Diabetes

In ATP III, diabetes is regarded as a CHD risk equivalent.

# CHD Risk Equivalents

- Risk for major coronary events equal to that in established CHD
- 10-year risk for hard CHD >20%

Hard CHD = myocardial infarction + coronary death



# Diabetes as a CHD Risk Equivalent

- 10-year risk for CHD  $\cong$  20%
- High mortality with established CHD
  - High mortality with acute MI
  - High mortality post acute MI

# CHD Risk Equivalents

- Other clinical forms of atherosclerotic disease (peripheral arterial disease, abdominal aortic aneurysm, and symptomatic carotid artery disease)
- Diabetes
- Multiple risk factors that confer a 10-year risk for CHD >20%

# Three Categories of Risk that Modify LDL-Cholesterol Goals

<u>Risk Category</u>	<u>LDL Goal (mg/dL)</u>
CHD and CHD risk equivalents	<100
Multiple (2+) risk factors	<130
Zero to one risk factor	<160

# ATP III Lipid and Lipoprotein Classification

## LDL Cholesterol (mg/dL)

<100	Optimal
100–129	Near optimal/above optimal
130–159	Borderline high
160–189	High
≥190	Very high

# ATP III Lipid and Lipoprotein Classification (continued)

## HDL Cholesterol (mg/dL)

<40      Low

≥60      High

# ATP III Lipid and Lipoprotein Classification (continued)

## Total Cholesterol (mg/dL)

<200	Desirable
200–239	Borderline high
≥240	High